



32419190.y *RDPDPSIGC* TFWYIPPCETALKQ- RGAPSIVVAVLVTMLYVMGKIAFPDARG-NRAHPQLHLWHLIAKVN- PN-RDRNPQPS-AVKHMQQWLGEVNNMARQLD- TRDDQEERLVVDMSPNENCFITRREYARVHDCMPBEK  
39959715.y *RSPGNAAC* TPIYIVPSPCGQKL- RGPAGCIVVAVLVTMLYAKKKLPLEDSRGSVRPNQRPLHWQIADLNRPQGARQILPAQV GRGPMPQQHQHQPMMNAVKMQCWLGEVNEAKERLN- TDVVELLVAKMVPFAGCTIRKTAIDLAYAEEQQQRQSEAGSK  
22549405.v *GQKTMDCD* TODYISPKIKGDN- YQIHEDWALCILVSELLAG-KSEFK- TDFDEKVS- LEILAGRQ-CQKLTFITSMD- DKN-AQTFI-NLKYKINNLYNLINNYNHHIRENFIL  
20069882.v *GQKTMDCD* AKDYISPKIKGDN- YQIHEDWAVCILVCEISAG-KSEFK- THFEELKLS- DEELAVRQ-CRKLTFITSDL- DKN-VQTFISSLRYNINNLYNLINYYNHHIRENFIL  
9630969.v *GSPSTFEC* TVDYISPKIKGNHA- AAVHFDTAVCVVLLYETSTG-KSEFK- LDQDESLD- VETLHKRQIOLDDVTFPPADF- DNPFLEBIFIICFLIGCYCDVPAHSYEVYIQKNTYWKSIVHWKQR-  
30387377.v *HSPGVHDC* ALIYISPKIKRRHN- YARISFDWAVCVVLYKLLTGKRFHFE- RSVAEVLDS- LSSMRRQQYNDITLKHNC- RNLQARDFVCECLTRFNECRLLIDHKCIVKWHPLINKHNSGCCSHASLVAEFS  
9629939.v *HSP-VHDC* ALIYISPKIKRRHN- YARISFDWAVCVVLYKLLTGKRFHFE- RADEVDELD- LASMRRQQYNDPAALKNV- RNLQARDFVCECLTRFNECRLLIDHKCIVKWHPLINKHNSGCCSHASLVAEFS  
9627752.v *NSLSVHDC* THYEYISPKIKRHTT- MBSVSEDVAYCVVLYKLLTGKRFHFE- KSEDEMLD- LNSMKRQQYNDIGVGLKHV- RNVNAREFVVCLETRYNIDCRLQNYKIIKHEPES-  
9635253.v *DTPSSYDG* IYEYISPKIKKFEL- NQESFDWAVCVVVAEILSR-KYPTDELESRKKNQ VMQSNSSSSSSSNDPEELLCKRKKLPKIKR- VSPVANDFVQSMCIPYTTKLHHSYNSIMRHPPFIFK-  
11068009.v *NTPSTHDC* ANVYISPKIKKEP- YQAAFDWAVCVVVAEILST-KYPT- VVDDGEDDCNCN- DIEDPEELLKHLKSIPKIRN- VSPAAANDFVQSMCIPYTTKLHHSYNSIMRHPPFIFK-  
32698542.v *NVPSPHYDC* TTYMISPKIKTAKIP- CTQSFDWAVCVVVAEILSK-NYFE- FDEEEDEDEIN- PKEMMNITYKQPLKKIPN- ISKNANDFVRQMPMLDINKRSLSYDIIKHPFNI-  
121686668.v *GAPSCYDG* TTVYISPKIKVKSV- CDVSESDWAVCVVVAEILST-HYFPD- LNDNDGEEVNS- IEPDEMLPLTYTKPLPRINH- VSNNANDFVRQMPMLDINKRSLSYDIIKHPFNI-  
14602244.v *GHTLLLRR* HHSLLISPKIKRHEA- YQTSDFWAVCVVVAEILST-EYFPD- INEDNEEMDA- IEPKDMPLPLYSKPLPTIEH- VSXKANANDFVRQMPMLDINKRSLSYDIIKHPFNI-  
30879702.v *TWYLPREBLGRTPS* TSHTVHTCG- RGAFCGDVFALEVWVMLFTGKIPPLELCKAHP- VWFINEALHLGSGRARIAMQKWLISFVDETSATLD- STDLLEPDIQVOMQAVFANRITDDELAVKVALQPO- RDHDGMDXLVMEWESDCKRKEITNRDTIGGLRPAARVYVSDVALHDPTTPS-  
39967917.y *TATINVAAAG* TFWYIPPCETALKQ- RGCPDGVIVAVLVTMLYKLLPLETTAEWIISHVVGKGPKNRDRARETMVQWLKRVKNARGLLALEGGPSDPTTLLHAAGRKCKAHRDGCCDAVRGDGDD-  
39967737.y *KEDGLKRCG* TFWYIPPCETALKQ- RGCPDGVIVAVLVTMLYKLLDCPESYP- VVWIISNIVDEVGDAADKMSDWLNTVACKRRSLG- SELMDRLVRLQCNEDPRRQWVITGLEEALKSKRML-  
2phr\_PHK *GRKLREVC* TSYIAPPKIECSMDNNSPVGYKEVDM-SIVVYMTLLAGSPPEW- RQOMMLMR- MIMSGNYQFGSPPEWDD- YSDTVKDLVRFIVVOPQRKHYEEAEEAPAHFFFOQY-  
113r\_PKA *GRTWXLCG* TPEYIAPPKIELSKG- -YNAKAVDWALVLTYEMAAAGYPPFAQDQPIQIYEKIVSG- -KVRFPSHFSSDLKDLLRNLLVDLTKRFGNLKNGVNDIKNHWFATTDWTAIYQRKVEAFI- EEEAPAHFFFOQY-  
2erk\_Erk2 *HDHTGFLKEXVA* PRMWPAPEMLNNSKG- -YIKSIDIISVCCILAEMISNRPPIPPGKHYLDQLNHILG- ILGSPSQEDLNCCIINMKARNYLLSLPHKKNVWPWNRLFFN- ADIKAKLIDDKMUTFN-HKIGIEVEQAJAHAYYLEQQYDPSDEPIAEAPFKFDME  
1jwh\_CKII *QYKNSVRVAS* RYFKGKPMVWVYQ- -MDYSDLMSSCMLASMIFRKKEPFHGHDNYDQLVRIAKVLG- TEDLYDYIDKYNIELDRFNDILGRHSRKWRFVHSENQ- HLVSPEALDFDKKLRRYHQGRPLRAREMHPFYTVVQDQARMGS-  
22788861.v *VONCTALM* TTRYISPKIKLSSY- -DYRSDMISFCVATAYCFTNGALFER- -ISDNCE- ARKVNVTMATDPLKVFDF- -QDLRELIVEMTYDTSRFLNLNSEHIERLKQVYKFFENYVS-  
1ias\_TGFbR *TDTIDIAPNHRVGKATRYMAPEWLDDSIKMKHFESFKRADITYAMCLVFWETARRCSIGGIEED* YQLPYYDLVPSPDSPEEMRKVVCEQKLRPNIPN- RWQSCEARVYMAKINRECWYANCAARITALRKTILSCLSQQEIGKM

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113r\_PKA *LDDLPEKEKLKEIFEETARFQFGYRS*  
2erk\_Erk2 *....|....|....|....|.*  
1jwh\_CKII *....|....|....|....|.*  
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